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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

2

**Complete if Known**

Application Number

Filing Date

First Named Inventor

Group Art Unit

Examiner Name

Attorney Docket Number

TBA

Herewith

Unknown

Unknown

89589.113000

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09/689565**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.    | T <sup>2</sup> |
|--------------------|-----------------------|--|----------------|
| S.A                | 1                     | Tomasi, Carlo, et al., "Shape and Motion From Image Streams Under Orthography: A Factorization Method", <u>International Journal of Computer Vision</u> , Vol. 9, No. 2, pp. 137-154, (1992).  | ✓              |
|                    | 2                     | Terzopoulos, et al., "Analysis and Synthesis of Facial Image Sequences Using Physical and Anatomical Models", <u>IEEE Transactions on Pattern Analysis and Machines Intelligence (PAMI)</u> , Vol. 15, No. 6, pp. 569-579, (June 1993).                            | ✓              |
|                    | 3                     | Essa, Irfan A., et al., "A Vision System for Observing and Extracting Facial Action Parameters", <u>Proceedings of CVPR</u> , Seattle, Washington, pp. 36-42 & 76-83, (June 1994).   | ✓              |
|                    | 4                     | Smolic, Aljoscha, et al., "Real-Time Estimation of Long-Term 3-D Motion Parameters for SNHC Face Animation and Model-Based Coding Applications", <u>IEEE Transactions on Circuits and Systems for Video Technology</u> , Vol. 9, No. 2, pp. 255-263, (March 1999). | ✓              |
|                    | 5                     | Yokoya, Naokazu, et al., "Motion Tracking of Deformable Objects by Active Contour Models Using Multiscale Dynamic Programming", <u>Journal of Visual Communication and Image Representation</u> , Vol. 4, pp. 382-391, (December 1993).                            | ✓              |
|                    | 6                     | Bascle, Benedicte, et al., "Tracking Computer Primitive in An Image Sequence", <u>IEEE International Conference Pattern Recognition</u> , Israel, pp. 426-431, (October 1994).   | ✓              |
|                    | 7                     | Meyer, Francois G., et al., "Region-Based Tracking Using Affine Motion Modes in Long Image Sequences", <u>CVGIP: Image Understanding</u> , Vol. 60, pp. 119-140, (September 1994).   | ✓              |
|                    | 8                     | Antoszczyszyn, Paul M., et al., "Tracking of the Motion of Important Facial Features in Model-Based Coding", <u>Signal Processing</u> , No. 66, pp. 249-260, (1998).   | ✓              |
|                    | 9                     | Petajan, Eric, Dr., "Very Low Bitrate Face Animation Coding in MPEG-4", <u>Lucent Technologies Technical Report</u> , pp. 1-33.  | ✓              |
|                    | 10                    | Isard, Michael, et al., "Contour Tracking by Stochastic Propagation of Conditional Density", <u>Proceedings of European Conference on Computer Vision</u> , Cambridge, UK, pp. 343-356, (1996).  | ✓              |
|                    | 11                    | Bascle, B., et al., "Separability of Pose and Expression in Facial Tracking and Animation", <u>Proceedings of 6th International Conference on Computer Vision</u> , pp. 323-328, (1998).   | ✓              |

Examiner  
Signature

Date

Considered

7.24.03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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|   |   |    | Application Number       | TBA            |
|   |   |    | Filing Date              | Herewith       |
|   |   |    | First Named Inventor     | A. Tanju Erdem |
|   |   |    | Group Art Unit           | Unknown        |
|   |   |    | Examiner Name            | Unknown        |
|   |   |    | Attorney Docket Number   | 89589.113000   |
| Sheet   | 3 | of | 3                        |                |

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| Examiner<br>Signature | <i>Sein</i> | Date<br>Considered | 7.24.03 |
|-----------------------|-------------|--------------------|---------|

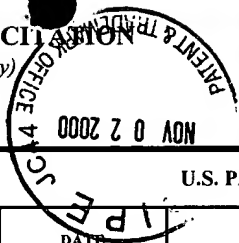
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**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)



Docket Number (Optional)

89589.113000

Application Number

09/689,585

Applicant(s)

A. Tanju Erdem

Filing Date

October 12, 2000

Group Art Unit

Unknown

**U.S. PATENT DOCUMENTS**

| *EXAMINER<br>INITIAL | REF | DOCUMENT NUMBER | DATE       | NAME         | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|-----|-----------------|------------|--------------|-------|----------|-------------------------------|
| S.A.                 | 12  | 5,907,626       | 05-25-1999 | Toklu et al. |       |          |                               |
|                      | 13  | 5,807,284       | 09-15-1998 | Foxlin       |       |          |                               |
|                      | 14  | 5,805,745       | 09-08-1998 | Graf         |       |          |                               |
|                      | 15  | 5,802,220       | 09-01-1998 | Black et al. |       |          |                               |
|                      | 16  | 5,774,591       | 06-30-1998 | Black et al. |       |          |                               |
|                      | 17  | 5,744,953       | 04-28-1998 | Hansen       |       |          |                               |
|                      | 18  | 5,280,530       | 01-18-1994 | Trew et al.  |       |          |                               |
|                      | 19  | 4,975,960       | 12-04-1990 | Petajan      |       |          |                               |
|                      |     |                 |            |              |       |          |                               |
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**FOREIGN PATENT DOCUMENTS**

|  | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation |    |
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|  |     |                 |      |         |       |          | YES         | NO |
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**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

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7.29/03

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## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

89589.113000

Application Number

09/689,595

Applicant(s)

A. Tanju Erdem

Filing Date

October 12, 2000

Group Art Unit

Unknown

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL | REF | DOCUMENT NUMBER | DATE       | NAME             | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|-----|-----------------|------------|------------------|-------|----------|-------------------------------|
| S.A                  | 1   | 6,064,390       | 05-16-2000 | Sagar et al.     | 345   | 420      |                               |
|                      | 2   | 6,052,132       | 04-18-2000 | Christian et al. |       |          |                               |
|                      | 3   | 6,047,078       | 04-04-2000 | Kang             |       |          |                               |
|                      | 4   | 6,037,949       | 03-14-2000 | DeRose et al.    |       |          |                               |
|                      | 5   | 6,031,539       | 02-29-2000 | Kang et al.      |       |          |                               |
|                      | 6   | 6,028,960       | 02-22-2000 | Graf et al.      |       |          |                               |
|                      | 7   | 6,020,892       | 02-01-2000 | Dillon           |       |          |                               |
|                      | 8   | 6,016,148       | 01-18-2000 | Kang et al.      |       |          |                               |
|                      | 9   | 6,009,210       | 12-28-1999 | Kang             |       |          |                               |
|                      | 10  | 5,982,909       | 11-09-1999 | Erdem et al      |       |          |                               |
| ↓                    | 11  | 5,923,337       | 07-13-1999 | Yamamoto         |       |          |                               |

## FOREIGN PATENT DOCUMENTS

|  | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation |    |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
|  |     |                 |      |         |       |          | YES         | NO |
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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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S. A. Tanju

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Substitute for form 1449A/PTO

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*(use as many sheets as necessary)*

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| Sheet | 1 | of | 2 |
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**Complete if Known**

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|-------------------------------|------------------|
| <b>Application Number</b>     | 09/689595        |
| <b>Filing Date</b>            | October 12, 2000 |
| <b>First Named Inventor</b>   | A. Tanju Erdem   |
| <b>Art Unit</b>               | 2671             |
| <b>Examiner Name</b>          | Cliff N. Vo      |
| <b>Attorney Docket Number</b> | 89589.113000     |

## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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Examiner  
Signature

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| Substitute for form 1449B/PTO   |   | <b>Complete if Known</b> |                  |                        |              |
|   |   | Application Number       | 09/689595        |                        |              |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(use as many sheets as necessary) |   | Filing Date              | October 12, 2000 |                        |              |
|   |   | First Named Inventor     | A. Tanju Erdem   |                        |              |
|   |   | Group Art Unit           | 2671             |                        |              |
|   |   | Examiner Name            | Cliff N. Vo      |                        |              |
| Sheet   | 2 | of                       | 2                | Attorney Docket Number | 89589.113000 |

| OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS |                       |   |   |
|--|-----------------------|---|---|
| Examiner Initials*                                 | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.   | T <sup>2</sup>                                    |
| S.A.   | 8                     | LI-AN TANG ET AL: "Analysis-based facial expression synthesis" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE OF IMAGE PROCESSING (ICIP) AUSTIN, NOV. 13-16, 1994 LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. 3 CONF. 1, Nov. 13, 1994, pages 98-102 XP010146456 ISBN: 0-8186-6952-7 the whole document  | ✓   |
|  | 9                     | COSI P ET AL: "Phonetic recognition by recurrent neural networks working on audio and visual information" SPEECH COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 19, no. 3, Sept. 1, 1996, pages 245-252, XP004013654; ISSN: 0167-6393 page 246, right hand column, line 13-page 248, right-hand column, line 7   | ✓   |
|  | 10                    | GUENTHER, BRIAN; GRIMM, CINDY; WOOD, DANIEL; MALVAR, HENRIQUE; PIGHIN FREDRICK: "Making faces" COMPUTER GRAPHICS, PROCEEDINGS. SIGGRAPH 98 CONFERENCE PROCEEDINGS, PROCEEDINGS OF SIGGRAPH 98: 25TH INTERNATIONAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, ORLANDO, FL, USA, 19-24 JULY, 1998, pages 55-66, XP002205956 1998, New York, NY, USA, ACM, USA ISBN: 0-89791-999-8 page 56, paragraph 2 -page 59, paragraph 3.3.3 | ✓   |
|  | 11                    | EBIHARA K ET AL: REAL-TIME 3-D FACIAL IMAGE RECONSTRUCTION FOR VIRTUAL SPACE TELECONFERENCING" ELECTRONICS & COMMUNICATIONS IN JAPAN, PART III-FUNDAMENTAL ELECTRONIC SCIENCE, SCRIPTA TECHNICA, NY, US, vol.82, no. 5, May 1999, pgs. 80-90, XP000875659 ISSN:1042-0967 pg 80, left-hand column, line 1-pg. 81, rt-hand col, ln 5  | ✓   |
|  | 12                    | CHEN T: "Technologies for building networked collaborative environments" IMAGE PROCESSING, 1999. ICIP 99. PROCEEDINGS. 1999 INTERNATIONAL CONFERENCE ON KOBE, JAPAN 24-28 OCT. 1999, PISCATAWAY, NJ, USA, IEEE, US, Oct. 24, 1999, pages 16-20, XP010368845, ISBN: 0-7803-5467-2, page 18, paragraph 2.3-page 19, paragraph 2.4   | ✓   |
|  | 13                    | LANDE C ET AL: "An MPEG-4 facial animation system driven by synthetic speech" MULTIMEDIA MODELING, 1998. MMM '98. PROCEEDINGS. 1998 LAUSANNE, SWITZERLAND 12-15 OCT. 1998, LOS ALAMITOS, CA. USA, IEEE COMPUT. SOC. US, Oct. 12, 1998, pages 203-212, XP010309519, ISBN: 0-8186-8911-0, pg. 1, left-hand column, line 1-page 207, right-hand column, line 30  | ✓   |
|  | 14                    | LAVAGETTO F ET AL: "THE FACIAL ANIMATION ENGINE: TOWARD A HIGH-LEVEL INTERFACE FOR THE DESIGN OF MPEG-4 COMPLIANT ANIMATED FACES" IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, IEEE INC. NEW YORK, US, vol. 9, no. 2, March 1999, pages 277-289, XP000805532, ISSN:1051-8215 page 278, left-hand column, line 11-line 22; page 279, left-hand column, line 23-page 282, left-hand column, line 39                            | ✓   |
|  |                       |   | RECEIVED<br>MAR 19 2003<br>Technology Center 2600 |

|                    |             |                 |         |
|--------------------|-------------|-----------------|---------|
| Examiner Signature | <i>Semi</i> | Date Considered | 7.24.03 |
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